

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

FIUN 1 9 2014

REPLY TO THE ATTENTION OF:

Wade Van Zee Regional Environmental Manager Stericycle 5815 Weldon Springs Road Clinton, IL 61727

Dear Mr. Van Zee:

This letter is in response to the enclosed February 27, 2014, petition for site-specific operating parameters for the Stericycle, Inc. facility in Clinton, Illinois. Stericycle owns and operates two existing hospital/medical/infectious waste incinerators (HMIWIs) subject to 40 CFR Part 60, Subpart Ce "Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators." Subpart Ce includes references to provisions in 40 CFR Part 60, Subpart Ec. In order to comply with the more stringent Subpart Ce emission limitations that become effective on October 6, 2014, Stericycle is retrofitting the existing air pollution control device (APCD) system for each HMIWI. Stericycle has included as part of the retrofit activities the installation of carbon beds for additional mercury (Hg) control. Since a carbon bed is not one of the APCDs identified in 40 CFR Part 60, Subpart Ec, § 60.56c(j) requires the company to submit a petition for site-specific operating parameters which are to be established during the initial performance test and continuously monitored thereafter. We have reviewed the Stericycle petition for site-specific operating parameters for the carbon beds and approve the request.

Stericycle has proposed the following operating parameters for the carbon beds. The parameters are based on operating experience at other Stericycle facilities and on requirements for carbon beds in other regulations, including 40 CFR Part 63, Subpart EEE § 63.1209(k)(7).

"The affected carbon beds shall be designed and operated with two beds in series, with the second bed serving as a guard bed. Stericycle shall, at a minimum:

- 1. Replace each carbon bed or the carbon in each bed before it has reached the end of its useful life. For the replacement of carbon in the primary bed, the secondary bed will be rotated into the primary bed position and the new carbon will be used in the secondary bed position;
- 2. Use the type of activated carbon used during the most recent performance test demonstrating compliance with the Hg emission limit until a subsequent performance test is conducted; and
- 3. Following notification to the Illinois Environmental Protection Agency, substitute a different brand of activated carbon provided that the replacement has equivalent or improved properties compared to the carbon used in the most recent performance test. The notification shall be received by IEPA at least ten days prior to changing the brand or type of activated carbon for the

carbon bed systems. The notification shall identify the new brand or type of carbon, the reason for the change, a demonstration that the substitute carbon will provide an equivalent or improved level of control of Hg as compared to carbon used in the previous performance test, with supporting documentation, and the expected results for control of mercury emissions.

Stericycle shall monitor the performance of the carbon beds in each affected carbon bed system as provided below to ensure that the carbon in each bed has not reached the end of its useful life to control Hg emissions to at least the level needed to comply with the limits of 40 CFR Part 60, Subpart Cc.

- 1. Monitoring shall be conducted consistent with the manufacturer's written specifications and recommendations.
- 2. Document the monitoring procedures in the operating and maintenance procedures.
- 3. Keep records of the performance monitoring."

The maximum waste charge rate and the maximum flue gas temperature monitored at the inlet to the carbon bed system will be established during the initial performance test and will be continuously monitored thereafter. Stericycle indicates that operation of a HMIWI above the maximum waste charge rate and above the maximum flue gas temperature at the inlet to the carbon bed system (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit. The minimum data recording frequency for the maximum waste charge rate will be once per hour and for the maximum flue gas temperature at the inlet to the carbon bed system it will be once per minute.

The U.S. Environmental Protection Agency, Region 5 approves the Stericycle petition for site-specific operating parameters for the carbon beds. The operating parameter limits are to be established during the initial performance test.

If you have any questions concerning the determination provided in this letter, please contact Ms. Jennifer Wilson of my staff at (312) 353-3115.

Sincerely,

Sara Breneman

Chief

Air Enforcement and Compliance Assurance Branch

Mundell So

Enclosure

cc: Eric Jones

Illinois Environmental Protection Agency

William V. Straub

ALL4 Inc.

## **CERTIFICATE OF MAILING**

l, Loretta Shaffer, certify that I sent a Request to Provide Information Pursuant to the Clean Air Act by Certified Mail, Return Receipt Requested, to:

Eric Jones
Manager Compliance Unit
Bureau of Air
Illinois Environmental Protection Agency
1201 Grand Avenue East
Springfield, Illinois 62702

Wade Van Zee Regional Environmental Manager Stericycle 5815 Weldon Springs Road Clinton, IL 61727

On the 19 day of JIME 2014.

Lorétta Shaffer

Administrative Program Assistant Planning and Administration Section

CERTIFIED MAIL RECEIPT for Mr. Jones:

7009 1680 0000 1676 2700

CERTIFIED MAIL RECEIPT for Mr. Van Zee:

700916800000 76762694

l also certify that l e-mailed a copy of this letter to William Straub, a Principal Consultant at All4 Inc., at wstraub@all4inc.com.